



How does our air quality compare with other schools?

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Introduction

Is the air quality in our school good? We think that it is important that our air is clean since we breathe it in everyday. Everyone can be affected by air pollution, but we know it affects some people more than others. For example, poor air quality can worsen the symptoms for those suffering with asthma.

In partnership with GLOBE we ran a campaign where we looked at the air quality in our school. We were also excited to compare ourselves with other schools.

We hope to use this information to make our school a better place. Any improvement in air quality has positive health benefits, particularly for people most affected by air pollution.

Research Methods

We installed NO₂ (nitrogen dioxide) tubes that would help test our air quality. We installed them in three different locations and left them in place for five weeks.

- Site 1 = Trees Near A Lot Of Grass
- Site 2 = Car Park, Near Road
- Site 3 = Near Bus Stop And The Road



After five weeks we sent the tubes off for analysis.

Our results
Site 1 = 17.42 µg/m³
Site 2 = 20.57 µg/m³
Site 3 = 24.45 µg/m³

We then compared our results with those from the other 28 schools who participated.

Site map



Research Questions

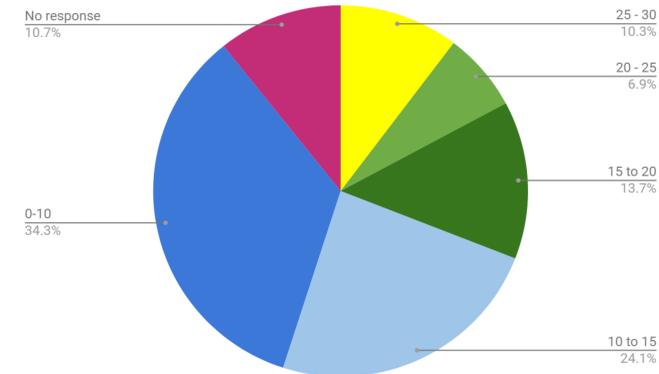
How much nitrogen dioxide is present in our air?

Is our air quality better than local areas? Or worse?

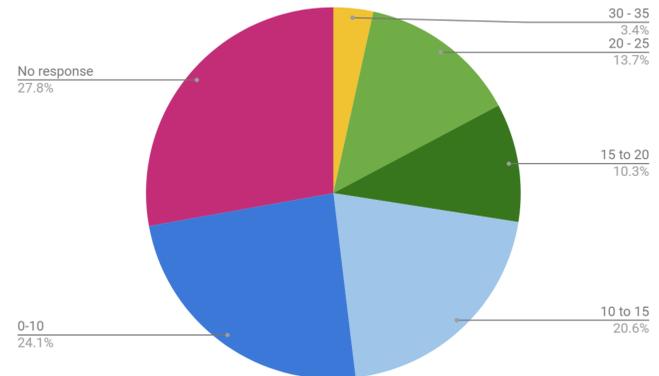
How does our air quality compare to other schools?

How could we improve our air quality?

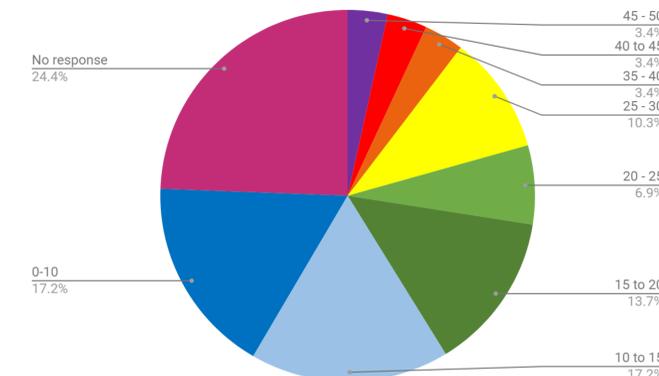
Results



Sheltered area: Our air quality is similar to 13.7% of schools surveyed, with an NO₂ reading of between 15- 20 µg/m³. However, the air quality in 58.4% of schools is better than ours.



Drop Off Zone/ Car Park: Our air quality is similar to 13.7% of schools surveyed, with an NO₂ reading of between 20- 25 µg/m³. However, the air quality in 55% of schools is better than ours.



Moving Traffic/ Main Road: Our air quality is similar to 13.7% of schools surveyed, with an NO₂ reading of between 20- 25 µg/m³. However, the air quality in 55% of schools is better than ours.

Discussion

Our data collection included a week when we were on holidays from school. We think there would have been less traffic then and that this might have affected our results.

Our data collection also took place during spring when a lot of our trees are in bloom. We think that this might have improved our air quality. If we had done this during the winter for example, we don't think our air quality would have been as good.

Conclusions

We would like to analyse our site during different times of the year to get a true indication of the average air quality on our site.

We would ultimately like to improve our overall air quality. We are considering running a 'Walk on Wednesday' campaign as well as starting a gardening club.

Bibliography